

REMARKS

Claims 32 and 37 have been cancelled, and claims 1, 7, 12, 14-17, 19-21, 27, 31, 36, 40-42, 45, and 49-50 have been amended. Claims 1-5, 7-9, 12-31, 33-36, and 38-53 remain for further consideration. No new matter has been added.

The Official Action is taken up in order as follows:

1-2. Claim 7 currently stands objected to because of two separate informalities. In response, those two informalities have been corrected as per the suggestion of the Examiner.

3. Claim 12 currently stands objected to because of two separate informalities. In response, those two informalities have been corrected as per the suggestion of the Examiner.

4. Claim 14 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner.

5. Claim 15 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner.

6. Claim 16 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner.

7. Claim 17 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner. Also, claim 17 has been

further amended to remove some incorrect language. It is submitted that the removal of this language does not affect the claim in any manner whatsoever.

8. Claim 19 currently stands objected to because of two separate informalities. In response, those two informalities have been corrected as per the suggestion of the Examiner.

9. Claim 20 currently stands objected to because of two separate informalities. In response, those two informalities have been corrected as per the suggestion of the Examiner.

10. Claim 21 currently stands objected to because of two separate informalities. In response, those two informalities have been corrected as per the suggestion of the Examiner.

11. Claim 41 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner.

12. Claim 45 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner.

13. Claim 49 currently stands objected to because of a single informality. In response, that informality has been corrected as per the suggestion of the Examiner.

14. Claim 50 currently stands objected to because of two separate informalities. In response, those two informalities have been corrected as per the suggestion of the Examiner.

15. Claim 40 currently stands rejected under 35 U.S.C. § 112, first paragraph -- specifically because the specification, while it is enabling for “mapping output 229 of the trellis decoder 350”, allegedly is not enabling for the claim limitation of “mapping the decision error signal.”

In response, claim 40 has been amended to remove the “mapping the decision error signal” language and replace it with “mapping an error-corrected symbol output” language. As the Examiner points out, the specification, on page 16, lines 9-16, and also in FIG. 8, the error-corrected symbol output 229 of the trellis decoder 350 is mapped and scaled back to data bits. Thus, it is submitted that there is support in the specification for this amendment to claim 40. No new matter has been added.

The subsequent step in claim 40, specifically with respect to “subtracting the equalizer output from the mapped symbol output to produce the decision error signal”, is also alleged to not be enabled. The Examiner again points to specific language in the specification regarding the characteristic of the output 229 of the trellis decoder 350 and how it affects the generation of the decision error signal.

In response, it is submitted that the amendment made to claim 40 discussed above (i.e., the “mapping an error-corrected symbol output” language) now obviates this lack of enablement rejection. As a result of this amendment, it submitted that claim 40, as amended herein, is allowable.

16. Claim 41 stands rejected for being dependent on rejected claim 40. In response, as a result of the amendment made to claim 40 discussed in paragraph 15 above, it is submitted that claim 40 is now allowable, and, as such, claim 41 is also now allowable.

17. Claims 31 and 36 currently stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,226,323 to Tan et al. in view of admitted prior art in the original disclosure.

In response, claim 32, which is merely objected to, has been canceled and claim 31 has been amended herein to include the limitations of claim 32. As a result, it is submitted that claim 31, as amended, is now allowable.

Further, claim 37, which is also merely objected to, has been canceled and claim 36 has been amended herein to include the limitations of claim 37. As a result, it submitted that claim 36, as amended, is now allowable.

18. The indication of allowability of claims 1-5 is hereby noted and appreciated. Claim 1 has been amended herein to correct a minor latent typographical error.

19. The indication of allowability of claims 7-9 is hereby noted and appreciated. As discussed above in paragraph 1-2, claim 7 has been amended herein to correct two informalities.

20. The indication of allowability of claims 12-16 is hereby noted and appreciated. As discussed above in paragraphs 3-6, claims 12 and 14-16 have each been amended herein to correct minor informalities.

21. The indication of allowability of claims 17-21 is hereby noted and appreciated. As discussed above in paragraphs 7-10, claims 17 and 19-21 have each been amended herein to correct minor informalities.

22. The indication of allowability of claims 22-30 is hereby noted and appreciated. Claim 27 has been amended herein to correct a minor latent typographical error.

23. The indication that claims 32-34 and 37-38 are merely objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, is hereby noted.

In response, claims 32-34 each depend directly from claim 31, a rejected independent claim. Based on the cancellation of claim 32 and the amendment to claim 31 herein, it is submitted that claims 33-34 are now both allowable.

Also, claims 37-38 each depend directly from claim 36, a rejected independent claim. Based on the cancellation of claim 37 and the amendment to claim 36 herein, it is submitted that claim 38 is now allowable.

24. The indication of allowability of claims 39 and 42 is hereby noted and appreciated.

25. The indication of allowability of claims 43-48 is hereby noted and appreciated. As discussed above in paragraph 12, claim 45 has been amended herein to correct a single informality.

26. The indication of allowability of claims 49-53 is hereby noted and appreciated. As discussed above in paragraph 14, claim 50 has been amended herein to correct two informalities.

For all of the foregoing reasons, reconsideration and allowance of claims 1-5, 7-9, 12-31, 33-36 and 38-53 is hereby respectfully requested. No new matter has been added.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

A handwritten signature in cursive script, reading "Patrick O'Shea", is written over a horizontal line.

Patrick J. O'Shea

Reg. No. 35,305

O'Shea, Getz & Kosakowski, P.C.

1500 Main Street, Suite 912

Springfield, MA 01115

(413) 731-3100, Ext. 102